

## ABSTRACT

A honeycomb filter for purifying exhaust gases that can almost completely burn and remove particulates accumulated on a wall portion by a regenerating process allowing residual ashes on the wall portion to easily move inside a through hole because the ashes are easily separated from the wall portion. In the honeycomb filter a columnar body made of porous ceramics, having parallel through holes in the length direction with a wall portion interposed therebetween, is designed so that part or all of the wall portion that separates the through holes from each other functions as a filter collecting particulates, wherein a length  $l$  of the longest side in a cross section perpendicular to the length direction of the through hole and a length  $L$  in the length direction of the columnar body satisfy:  $60 \leq L/l \leq 500$ , and a surface roughness  $R_a$  (according to JIS B 0601) of the through hole inner wall satisfies:  $R_a \leq 100 \mu\text{m}$ .